

4/4/1

DIALOG(R) File 351:DERWENT WPI

(c) 2000 Derwent Info Ltd. All rts. reserv.

AA- 93-305282/199339 |

XR- <XRAM> C93-135814|

TI- Cationically crosslinkable polyorganosiloxane compsn. - contg. complex onium borate cpd. and use for preventing adhesion between surfaces|

PA- RHONE POULENC CHIM (RHON ); RHONE-POULENC CHIM (RHON ); RHONE POULENC IND (RHON )|

AU- <INVENTORS> CAVEZZAN J; PRIOU C|

NC- 013|

NP- 012|

PN- EP 562922, A1 19930929 EP 93400705 A 19930319 B 199339 B

PN- AU 9335389 A 19930930 AU 9335389 A 19930322 B 199347

PN- FR 2688790 A1 19930924 FR 923441 A 19920323 B 199347

PN- FI 9301254 A 19930924 FI 931254 A 19930322 B 199349

PN- CA 2092137 A 19930924 CA 2092137 A 19930322 B 199350

PN- JP 6041433 A 19940215 JP 9386938 A 19930323 B 199411

PN- US 5340898 A 19940823 US 9335603 A 19930323 B 199433

PN- AU 662963 B 19950921 AU 9335389 A 19930322 B 199545

PN- EP 562922 B1 19970521 EP 93400705 A 19930319 B 199725

PN- JP 2623426 B2 19970625 JP 9386938 A 19930323 B 199730

PN- DE 69310797 E 19970626 DE 610797 A 19930319 B 199731

<AN> EP 93400705 A 19930319

PN- ES 2102616 T3 19970801 EP 93400705 A 19930319 B 199737|

AN- <LOCAL> EP 93400705 A 19930319; AU 9335389 A 19930322; FR 923441 A 19920323; FI 931254 A 19930322; CA 2092137 A 19930322; JP 9386938 A 19930323; US 9335603 A 19930323; AU 9335389 A 19930322; EP 93400705 A 19930319; JP 9386938 A 19930323; DE 610797 A 19930319; EP 93400705 A 19930319; EP 93400705 A 19930319|

AN- <PR> FR 923441 A 19920323|

CT- 1.Jnl.Ref; DE 2025469; EP 353030; EP 442635; EP 464706; JP 79050596; JP 7950596|

FD- EP 562922 A1

<DS> (Regional): BE DE ES FR GB IT LU NL

FD- AU 662963 B Previous Publ. AU 9335389

FD- EP 562922 B1

<DS> (Regional): BE DE ES FR GB IT LU NL

FD- JP 2623426 B2 Previous Publ. JP 6041433

FD- DE 69310797 E Based on EP 562922

FD- ES 2102616 T3 Based on EP 562922|

LA- EP 562922(F<PG> 10); FR 2688790(15); CA 2092137(F); JP 6041433(8); US 5340898(6); EP 562922(F<PG> 13); JP 2623426(8)|

DS- <REGIONAL> BE; DE; ES; FR; GB; IT; LU; NL|

AB- <BASIC> EP 562922 A

Polyorganosiloxane compsns. which are cationically crosslinkable contain a catalytic amt. of a onium borate of an element of Gps.15-17 of the Periodic Classification (Chem. & Eng. News, vol. 63, No. 5,6, 1985) in which the cationic unit of the onium borate is (1) the onium salts of formula ((R1)n-A-(R2)m)+ or (2) the oxoisothiochromanium salts of WO9011303 esp. the sulphonium salt of 2-ethyl-4-oxoisothiochromium or of 2-dodecyl -4-oxoisothiochromanium and the borate anion has formula (BXaRb)-. A = element of Gps.15-17 e.g. iodine S, Se, P, N, R1 = 6-20C carbocyclic or heterocyclic aryl gp. opt. contg. N and S as heteroatoms, R2 = R1 or 1-30C alk(en)yl opt. substd. with 1-25C alkoxy or alkyl, NO2, Cl, Br, CN, COOH or mercapto, n = integer from 1 to v+1, v = valency of A, m = integer from 0 to v-1, n+m = v+1, aa, b = 0-4, a+b = 4. X = halogen (Cl,F) with a = 0-3, or OH with a = 0-2, R = Ph substd. with an electron-attracting gp., e.g. CF3, NO2, CN or with at least 2 halogen atoms (esp. F) or an aryl gp. with at least 2 aromatic rings e.g. biphenyl or naphthyl opt. substd. with an electron-attracting element or gp., esp. halogen (partic. F), CF3, NO2, CN.

USE/ADVANTAGE - A process for rendering articles non-adhesive to surfaces to which they normally adhere involves application of 0.1-5 g/sq.m. of surface of the compsn., and crosslinking photochemically or with an electron beam, esp. by UV radiation of wavelength 200-400 nm.

(claimed). The borates are non-toxic.

Dwg.0/0|

AB- <EP> EP 562922 B

Compositions based on a cationically crosslinkable polyorganosiloxane and on an effective catalytic quantity of an onium borate of an element from groups 15 to 17 of the periodic classification (Chem. & Eng. News, Vol. 63, No. 5, 26; 4 February 1985), which compositions are characterised in that the cationic entity of the said onium borate is chosen from (1) the onium salts of formula  $((R1)_n-A-(R2)_m)^+ (I)$  in which formula: A represents an element from groups 15 to 17, such as I, S, Se, P or N, for example; R1 represents a C6-C20 heterocyclic or carbocyclic aryl radical, it being possible for the said heterocyclic radical to contain, as heteroelements, nitrogen or sulphur, for example; R2 represents R1 or a linear or branched C1-C30 alkenyl or alkyl radical, the said radicals R1 and R2 optionally being substituted by a C1-C25 alkoxy, C1-C25 alkyl, nitro, chloro, bromo, cyano, carboxyl or mercapto group, for example; n is an integer ranging from 1 to v+1, v being the valency of the element A; m is an integer ranging from 0 to v-1 with  $n+m = v+1$ ; (2) the oxoisothiochromanium salts having the formula (II) in which R3 represents a C1-C20 alkyl or cycloalkyl radical or an aryl radical, especially the 2-ethyl-4-oxoisothiochromanium or 2-dodecyl-4-oxoisothiochromanium sulphonium salt, and in that the anionic borate entity has the formula  $(BXaRb)^{-}$  in which formula: a and b are integers ranging from 0 to 4 with  $a+b = 4$ ; the symbols X represent a halogen atom (chlorine or fluorine) with a = 0 to 3; an OH functional group with a = 0 to 2; the symbols R are identical or different and represent a phenyl radical substituted by at least one electron-withdrawing group, such as CF3, NO2 or CN, for example, or by at least 2 halogen atoms (most particularly fluorine); an aryl radical containing at least two aromatic rings, such as biphenyl or naphthyl, for example, and optionally substituted by at least one electron-withdrawing element or group, especially a halogen atom (most particularly fluorine), CF3, NO2 or Cn.

Dwg.0/0|

AB- <US> US 5340898 A

Cationically-crosslinkable polyorganosiloxane compsn. includes catalytic onium borate (BXaRb), and a Gp. 15-17 element.

X is halogen (if a is 3 or less) or OH (if a is 2 or less); a is 0-3; b is 0-4; (a+b) is 4; and each R is Ph (substd. by 1 or more electron-withdrawing gp. of by 2 or more halogens), or aryl gp. contg. 2 aromatic rings and opt. substd. by 1 or more electron-withdrawing gp.

USE - As an antiadherent coating on the surface(s) of a shaped article.

Dwg.0/0|

DE- <TITLE TERMS> CATION; CROSSLINK; POLY; ORGANO; SILOXANE; COMPOSITION; CONTAIN; COMPLEX; ONIUM; BORATE; COMPOUND; PREVENT; ADHESIVE; SURFACE|

DC- A26; A82; E19; G02; P42; P81|

IC- <MAIN> C08G-077/04; C08G-077/06; C08G-077/08; C08J-003/24; C08L-083/04; C09D-183/06|

IC- <ADDITIONAL> B01J-019/08; B05D-005/08; C07F-005/02; C08G-077/32; C08J-003/28; C08K-005/00; C08K-005/55; C09D-005/00; C09D-183/04; C09D-183/07; C09D-183/08; C23C-014/30; D21H-019/16; D21H-019/32; G02B-006/12; H01B-003/30|

MC- <CPI> A06-A00E1; A08-C01; A08-D01; A12-B01C; E05-C; G02-A05D|

FS- CPI; EngPI||